

REMARKS

Amendments to the Claims

Claims 1-10 are under examination with entry of the present Amendment. Original claims 5 and 6 remain unchanged. Claim 2 has been cancelled without prejudice. Applicants reserve the right to pursue any unclaimed subject matter in one or more divisional or continuation applications. No amendment of inventorship is required.

Rejections under 35 U.S.C. §112

Claims 6, 8-10 have been amended to clarify the percentage porosity of the seal after firing. It is submitted that the provisions of 35 USC § 112 have been complied with.

Rejections under 35 U.S.C. §102

The Office Action rejects claims 1, 3-10 as being anticipated by the newly cited Luthra reference (US Patent No. 4,933.309). Amongst other items, the Office Action states that:

Luthra is considered to disclose a composite structure in a fired state (col. 3, lines 10-20 and 40-55). Additionally, Luthra discloses the use of tape-casting to produce the ceramic piece with the binder and sintering aid evaporated off, with a fired porosity of 60% or less (col. 3, lines 52-55 for instance).

With respect, Applicants traverse this rejection. Independent claim 1 clearly identifies that the seal has a post-fired porosity of between about 35% and 60%. The Luthra reference which the Office Action points to is as follows:

Preferably, after removal of the shaping-aid materials, the compact has a porosity of less than 60% to promote subsequent densification.

It is clear that Luthra refers to porosity at this intermediate stage, prior to densification. This stage is after removal of "shaping-aid materials", not after firing. These shaping-aid materials are said to evaporate away at low temperatures. Elsewhere in the Luthra reference, it is clear that the ceramic

composite material taught by Luthra is fully dense. For example, see col. 6, lines 22-24, where it is stated:

The present composite is a solid and has a porosity of less than about 30%, or less than about 10%, preferably less than about 5%, more preferably less than about 1%, by volume of the composite.

Clearly, Luthra does not describe and in fact teaches away from a finished material which has a porosity greater than 35%.

The Luthra composite material is thus not comparable to Applicants' claimed seal. Reconsideration and withdrawal of this rejection of claim 1 and dependent claims 3-10 are thus respectfully requested.

CONCLUSION

In view of the foregoing remarks and amendments, it is respectfully submitted that this application is in condition for allowance and allowance thereof is respectfully requested.

If there are any outstanding issues related to patentability, the courtesy of a telephone interview is requested and the Examiner is invited to call to arrange a mutually convenient time.

Respectfully submitted,

Robert Brule, *et al.*

By: 

Edward Yoo (Reg. No. 41,435)

CORRESPONDENCE ADDRESS CUSTOMER NO. 22828